Complete Summary

TITLE

Breast cancer screening: percentage of women 50 to 69 years of age who had one or more mammograms during the measurement year or the year prior to the measurement year.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the Measure Validity page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of women 50 through 69 years of age who had one or more mammograms during the measurement year or year prior to the measurement year.

RATIONALE

Breast cancer is the second most common type of cancer among American women, with approximately 192,000 new cases reported each year. It is most common in women over 50. Women whose breast cancer is detected early have more treatment choices and better chances for survival. Mammography screening has been shown to reduce mortality by 20% to 30% among women 40 and older.

The U.S. Preventive Services Task Force, the American Academy of Family Physicians and the American College of Preventive Medicine recommend mammograms as the most effective method for detecting breast cancer when it is most treatable. When high-quality equipment is used and well-trained radiologists read the x-rays, 85-90 percent of cancers are detectable.

PRIMARY CLINICAL COMPONENT

Breast cancer; screening mammography

DENOMINATOR DESCRIPTION

Women 52 through 69 years of age as of December 31 of the measurement year (see the "Description of Case Finding" and the "Denominator Inclusions/Exclusions" fields in the Complete Summary)

NUMERATOR DESCRIPTION

One or more mammograms during the measurement year or the year prior to the measurement year (see the "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- Screening for breast cancer: recommendations and rationale.

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Use of this measure to improve performance
Variation in quality for the performance measured

EVIDENCE SUPPORTING NEED FOR THE MEASURE

American Cancer Society. Facts and figures 1999: selected cancers. [internet]. American Cancer Society; 1999[cited 1999 Nov 12]. [12 p.].

National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005.

Screening mammograms: questions and answers. [internet]. Bethesda (MD): National Cancer Institute; 2002 May 3[cited 2003 Nov 18]. [9 p].

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Accreditation
Decision-making by businesses about health-plan purchasing
Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/Medicare
External oversight/State government program
Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Managed Care Plans

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

TARGET POPULATION AGE

Age 50 through 69 years

TARGET POPULATION GENDER

Female (only)

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

See "Rationale" field.

ASSOCIATION WITH VULNERABLE POPULATIONS

Older women are at increased risk for breast cancer. About 80 percent of breast cancers occur in women over the age of 50. More than 50% of cancers are in women over 65 with a 50% mortality rate. The accuracy of mammography is also improved for older women due to reductions in the density of breast tissue and has been shown to reduce mortality by 20 percent to 40 percent.

EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

Balducci L, Phillips DM. Breast cancer in older women. Am Fam Physician1998 Oct 1;:1163-74.

Rosenquist CJ, Lindfors KK. Screening mammography beginning at age 40 years: a reappraisal of cost-effectiveness. Cancer1998 Jun 1;82(11):2235-40. PubMed

Salzmann P, Kerlikowske K, Phillips K. Cost-effectiveness of extending screening mammography guidelines to include women 40 to 49 years of age. Ann Intern Med1997 Dec 1;127(11):955-65. PubMed

BURDEN OF ILLNESS

See "Rationale" and "Association with Vulnerable Populations" fields.

UTILIZATION

Unspecified

COSTS

More is spent on the detection and treatment of breast cancer than any other cancer; in 1990, $6.5 billion was spent.

The average cost of a mammogram can range from around $55 (Medicare rural rates) to over $200 (urban commercial rate). Mammography screening costs roughly $60,000 per life year gained.

EVIDENCE FOR COSTS

Kattlove H, Liberati A, Keeler E, Brook RH. Benefits and costs of screening and treatment for early breast cancer. Development of a basic benefit package. JAMA1995 Jan 11;273(2):142-8. PubMed

White E, Urban N, Taylor V. Mammography utilization, public health impact, and cost-effectiveness in the United States. Annu Rev Public Health1993;14:605-33. [90 references] PubMed

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Both users and nonusers of care

DESCRIPTION OF CASE FINDING

Women 52 through 69 years of age as of December 31 of the measurement year who were continuously enrolled during the measurement year and the year prior to the measurement year with no more than one gap in enrollment of up to 45 days during each year of continuous enrollment (commercial, Medicare) or with not more than a one-month gap in coverage during each year of continuous enrollment (Medicaid)

DENOMINATOR SAMPLING FRAME

Enrollees or beneficiaries

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions
Women 52 through 69 years of age as of December 31 of the measurement year

Exclusions
Exclude women who had a bilateral mastectomy and for whom administrative data does not indicate that a mammogram was performed. The managed care organization (MCO) should look for evidence of a bilateral mastectomy as far back as possible in the member's history. If the MCO finds evidence of two separate mastectomies, it may exclude the member from the measure. The bilateral mastectomy must have occurred by December 31 of the measurement year. Refer to Table BCS-B in the original measure documentation for codes to identify exclusions for breast cancer screening.

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Patient Characteristic

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions
One or more mammograms during the measurement year or the year prior to the measurement year. A woman had a mammogram if a submitted claim/encounter contains any one of the following codes.

Exclusions
The managed care organization (MCO) may not count biopsies or breast ultrasounds for this measure because they are used for diagnostic and therapeutic purposes only and are not valid for primary breast cancer screening.

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure requires that separate rates be reported for commercial, Medicare, and Medicaid product lines.

STANDARD OF COMPARISON

External comparison at a point in time
External comparison of time trends
Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Breast cancer screening (BCS).

MEASURE COLLECTION

HEDIS® 2006: Health Plan Employer Data and Information Set

MEASURE SET NAME

Effectiveness of Care

DEVELOPER

National Committee for Quality Assurance

INCLUDED IN

Ambulatory Care Quality Alliance

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

1993 Jan

REVISION DATE

2005 Jan

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: National Committee for Quality Assurance (NCQA). HEDIS 2004. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2003. 374 p.

SOURCE(S)

National Committee for Quality Assurance (NCQA). HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 350 p.

MEASURE AVAILABILITY

The individual measure, "Breast Cancer Screening (BCS)," is published in "HEDIS 2006. Health plan employer data & information set. Vol. 2, Technical specifications."

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

COMPANION DOCUMENTS

The following is available:

- National Committee for Quality Assurance (NCQA). The state of health care quality 2005: industry trends and analysis. Washington (DC): National Committee for Quality Assurance (NCQA); 2005. 74 p.

For more information, contact the National Committee for Quality Assurance (NCQA) at 2000 L Street, N.W., Suite 500, Washington, DC 20036; Telephone: 202-955-3500; Fax: 202-955-3599; Web site: www.ncqa.org.

NQMC STATUS

This NQMC summary was completed by ECRI on July 18, 2003. The information was verified by the measure developer on October 24, 2003. This NQMC summary was updated by ECRI on June 16, 2006. The updated information was not verified by the measure developer.

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